

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1 (CURRENTLY AMENDED): A printing method for forming an image by using a print head, wherein the print head has a plurality of arrayed chips, the chips each have a plurality of print elements arranged in a column direction, the plurality of print elements are divided in a number of time-division drive blocks, the plurality of print elements include [[the]] first print elements and at least two second print elements situated near [[the]] end of the [[chip]] chips in relation to the first print elements, and the chips are arranged so that the second print elements in adjoining chips are aligned in a scan direction with printing positions which overlap in the scan direction,[[;]] wherein

the chips are arranged so that the first print elements in adjoining chips are not aligned in the scan direction,[[;]]

[[the]] number of second print elements is equal in number to an integer times the number of drive blocks,[[;]]

the printing method comprising the steps of:

moving the print head and a print medium relative to each other in the scan direction that crosses the column direction; and

dividing the first print elements into [[the]] a plurality of drive blocks and activating the drive blocks of the first print elements on a time-division basis to form an image on the print medium,[[;]]

wherein drive timings with which to activate the second print elements have the same time-division drive timing, and the second print elements overlapping with each other in the scan direction are selectively activated so as to be alternatively actuated depending on a column position in the scan direction.

2 (CANCELLED):

3 (ORIGINAL): A printing method according to claim 1, wherein the plurality of print elements in the print head are arranged in an entire widthwise printable range of the print medium.

4 (ORIGINAL): A printing method according to claim 1, wherein the plurality of print elements in the print head are ink jet print elements that can be activated to eject ink from nozzles.

5 (ORIGINAL): A printing method according to claim 4, wherein the ink jet print elements have electrothermal transducers that generate energy for ejecting ink.

6 (CURRENTLY AMENDED): A printing apparatus for forming an image by using a print head, comprising:

a print head having a plurality of arrayed chips, the chips each having a plurality of print elements arranged in a column direction, the plurality of print elements being divided in a number of time-division drive blocks, the plurality of print elements including [[the]] first print elements and at least two second print elements situated near [[the]] end of the [[chip]] chips in relation to the first print elements,[[;]]

wherein the print head and a print medium are moved relative to each other in a scan direction that crosses the column direction,₁[[;]]

the plurality of print elements of each of said drive blocks are activated in the drive blocks on a time-division basis to form an image on the print medium,₁[[;]]

the first print elements in adjoining chips are [[not]] aligned in the scan direction;
the second print elements in adjoining chips are aligned in the scan direction with printing positions which overlap in the scan direction,₁[[; and]]

[[the]] number of second print elements in the adjoining chips aligned in the scan direction is equal to an integer times the number of the time-division drive blocks, and

the second print elements overlapping with each other in the scan direction are selectively activated so as to be alternatively actuated depending on a column position in the scan direction.

7 (PREVIOUSLY PRESENTED): A printing apparatus according to claim 6, wherein the second print elements are allocated to the same drive block for activation.

8 (ORIGINAL): A printing apparatus according to claim 6, wherein the plurality of print elements in the print head are arranged in an entire widthwise printable range of the print medium.

9 (ORIGINAL): A printing apparatus according to claim 6, wherein the plurality of print elements in the print head are ink jet print elements that can be activated to eject ink from nozzles.

10 (ORIGINAL): A printing apparatus according to claim 9, wherein the ink jet print elements have electrothermal transducers that generate energy for ejecting ink.

11 (CURRENTLY AMENDED): A print head for forming an image, comprising:

a plurality of arrayed chips, the chips each having a plurality of print elements arranged in a column direction, the plurality of print elements being divided in a number of time-division drive blocks, the plurality of print elements including [[the]] first print elements and at least two second print elements situated near [[the]] end of the [[chip]] chips in relation to the first print elements,[[;]]

wherein the print head and a print medium are moved relative to each other in a scan direction that crosses the column direction,[[;]]

wherein the plurality of print elements of each of the drive blocks are activated in the drive blocks on a time-division basis to form an image on the print medium,[[;]]

wherein the first print elements in adjoining chips are not aligned in the scan direction,[[;]]

wherein the second print elements in adjoining chips are aligned in the scan direction with printing positions which overlap in the scan direction forming a set of print elements, said print head comprising a number of sets of print elements, and[[;]]

wherein [[the]] number of second print elements in the adjoining chips aligned in the scan direction is equal to an integer times the number of drive blocks, and the second print elements overlapping with each other in the scan direction are selectively activated so as to be alternatively actuated depending on a column position in the scan direction.

12 (PREVIOUSLY PRESENTED): A print head according to claim 11, wherein the second print elements are allocated to the same drive block for activation.

13 (ORIGINAL): A print head according to claim 11, wherein the plurality of print elements are arranged in an entire widthwise printable range of the print medium.

14 (ORIGINAL): A print head according to claim 11, wherein the plurality of print elements are ink jet print elements that can be activated to eject ink from nozzles.

15 (ORIGINAL): A print head according to claim 14, wherein the ink jet print elements have electrothermal transducers that generate energy for ejecting ink.

16 (CURRENTLY AMENDED): A program for forming an image by using a print head, wherein the print head has a plurality of arrayed chips, the chips each have a plurality of print elements arranged in a column direction, the print elements arranged are divided in a number of time-division drive blocks, the plurality of print elements include [[the]] first print elements and at least two second print elements situated near [[the]] end of the [[chip]] chips in relation to the first print elements, and the chips are arranged so that the second print elements in adjoining chips are aligned in a scan direction with printing positions which overlap in the scan direction, the program causing a computer to execute the steps comprising:

moving the print head and a print medium relative to each other in the scan direction that crosses the column direction;

activating the drive blocks of the plurality of print elements on a time-division basis to form an image on the print medium; and

activating the second print elements at the same time-division drive timing,
wherein the second print elements overlapping with each other in the scan direction are selectively activated so as to be alternatively actuated depending on a column position in the scan direction.

17 (ORIGINAL): A storage media readable by a computer and storing the program of claim

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